

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1- 11. (canceled).

12. (previously presented): A printing apparatus comprising:

an ejection head moving in a first direction, said ejection head having a plurality of nozzles provided along a second direction which is different from said first direction, said nozzle selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium;

wherein

said printing apparatus is configured to print a first correction pattern and a second correction pattern, said first correction pattern and said second correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved,

said first correction pattern and said second correction pattern are made of dots arranged in said first direction and said second direction,

each dot that makes up said first correction pattern is a certain size,

the size of each dot that makes up said second correction pattern is different from the size of said dots that make up said first correction pattern,

a distance between the centers of neighboring dots arranged along said first direction of said first correction pattern and a distance between the centers of neighboring dots arranged along said first direction of said second correction pattern are limited to be the same distance, and

a distance between the centers of neighboring dots arranged along said second direction of said first correction pattern is different from a distance between the centers of neighboring dots arranged along said second direction of said second correction pattern.

13. (previously presented): A printing apparatus according to claim 12, wherein said first correction pattern and said second correction pattern each have a plurality of sub-patterns, and each sub-pattern is made of dots arranged in said first direction and said second direction.

14. (previously presented): A printing apparatus according to claim 13, wherein each said sub-pattern has forward-pass dots that are formed with a predetermined distance in said first direction therebetween during said forward pass and return-pass dots that are formed with a predetermined distance in said first direction therebetween during said return pass, and an amount of misalignment between a position at which the forward-pass dots are formed and a position at which the return-pass dots are formed is different for each sub-pattern.

15. (previously presented): A printing apparatus according to claim 14, wherein said predetermined distance is at least twice the spacing in said second direction between the dots of said sub-pattern.

16. (previously presented): A printing apparatus according to claim 14, further comprising:

a density detection member for detecting a density of said sub-patterns;

wherein

said misalignment is corrected based on a result of the density detected by said density detection member.

17. (previously presented): A printing apparatus comprising:

an ejection head moving in a first direction, said ejection head having a plurality of nozzles provided along a second direction which is different from said first direction, said nozzle selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium;

wherein

said printing apparatus is configured to print a first correction pattern and a second correction pattern, said first correction pattern and said second correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved,

said first correction pattern and said second correction pattern are made of dots arranged in said first direction and said second direction,

each dot that makes up said first correction pattern is a certain size,

the size of each dot that makes up said second correction pattern is different from the size of said dots that make up said first correction pattern,

a distance between the centers of neighboring dots arranged along said first direction of said first correction pattern and a distance between the centers of neighboring dots arranged along said first direction of said second correction pattern are limited to be the same distance,

a distance between the centers of neighboring dots arranged along said second direction of said first correction pattern is different from a distance between the centers of neighboring dots arranged along said second direction of said second correction pattern,

said printing apparatus is capable of

receiving command information from a user based on said first correction pattern and said second correction pattern, and,

correcting said misalignment based on the command information.

18. (previously presented): A printing apparatus comprising:

an ejection head moving in a first direction, said ejection head having a plurality of nozzles provided along a second direction which is different from said first direction, said nozzle selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium;

wherein

said printing apparatus is configured to print a first correction pattern and a second correction pattern, said first correction pattern and said second correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved,

said first correction pattern and said second correction pattern are made of dots arranged in said first direction and said second direction,

each dot that makes up said first correction pattern is a certain size,

the size of each dot that makes up said second correction pattern is different from the size of said dots that make up said first correction pattern,

a distance between the centers of neighboring dots arranged along said first direction of said first correction pattern and a distance between the centers of neighboring dots arranged along said first direction of said second correction pattern are limited to be the same distance,

a distance between the centers of neighboring dots arranged along said second direction of said first correction pattern is different from a distance between the centers of neighboring dots arranged along said second direction of said second correction pattern,

said first correction pattern and said second correction pattern have a plurality of sub-patterns,

each sub-pattern is made of dots arranged in said first direction and said second direction,

each said sub-pattern has forward-pass dots that are formed with a predetermined distance in said first direction therebetween during said forward pass and return-pass dots that

are formed with a predetermined distance in said first direction therebetween during said return pass,

an amount of misalignment between a position at which the forward-pass dots are formed and a position at which the return-pass dots are formed is different for each sub-pattern,

said predetermined distance is at least twice the spacing in said second direction between the dots of said sub-pattern,

said printing apparatus further comprises a density detection member for detecting a density of said sub-patterns, and

said misalignment is corrected based on a result of the density detected by said density detection member.

19. (canceled):

20. (previously presented): A computer system comprising:

a computer main unit; and

a printing apparatus that is connected to said computer main unit, said printing apparatus having an ejection head moving in a first direction, said ejection head having a plurality of nozzles provided along a second direction which is different from said first direction, said nozzle selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium;

wherein

said printing apparatus is configured to print a first correction pattern and a second correction pattern, said first correction pattern and said second correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved,

said first correction pattern and said second correction pattern are made of dots arranged in said first direction and said second direction,

each dot that makes up said first correction pattern is a certain size,

the size of each dot that makes up said second correction pattern is different from the size of said dots that make up said first correction pattern,

a distance between the centers of neighboring dots arranged along said first direction of said first correction pattern and a distance between the centers of neighboring dots arranged along said first direction of said second correction pattern are limited to be the same distance, and

a distance between the centers of neighboring dots arranged along said second direction of said first correction pattern is different from a distance between the centers of neighboring dots arranged along said second direction of said second correction pattern.

21. (previously presented): A method of printing comprising:

moving an ejection head in a first direction, said ejection head having a plurality of nozzles provided along a second direction which is different from said first direction;

selectively ejecting ink droplets of a plurality of sizes from said nozzle to form dots on a printing medium;

printing a first correction pattern and a second correction pattern, said first correction pattern and said second correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved,

said first correction pattern and said second correction pattern are made of dots arranged in said first direction and said second direction,

each dot that makes up said first correction pattern is a certain size, and

the size of each dot that makes up said second correction pattern is different from the size of said dots that make up said first correction pattern; and

limiting a distance between the centers of neighboring dots arranged along said first direction of said first correction pattern and a distance between the centers of neighboring dots arranged along said first direction of said second correction pattern to be the same, wherein a distance between the centers of neighboring dots arranged along said second direction of said first correction pattern is different from a distance between the centers of neighboring dots arranged along said second direction of said second correction pattern.